

## **ABSTRACT OF THE DISCLOSURE**

A mat-shaped thermal insulator made of inorganic fiber, wherein at least a part of inorganic fibers is built-up in a direction parallel to lateral surfaces of the insulator, and said insulator is formed by cutting a fibrous built-up article formed by building-up inorganic fibers, to form cut built-up articles, rotating at least one of the cut articles by an angle of 90 degrees in a direction perpendicular to a longitudinal direction, to form a rotated built-up article in which the inorganic fibers are built-up in a direction parallel to lateral sides of the cut article, and integrating the cut articles and/or the rotated article transversally in a direction perpendicular to cutting direction. Preferably, the lateral surfaces of the insulator are inclined. Still preferably, longitudinal cuts are formed on the lateral surfaces of the insulator so as to make the insulator partially compressible.